

North American Monsoon Experiment (NAME) "Teacher in the Field" Opportunity

Have you ever dreamed of participating in exciting international scientific research? If you have, the National Oceanic and Atmospheric Administration (NOAA) "Teacher in the Field" program is looking for you!

We are seeking two energetic, adventurous, dedicated teachers for our sponsored "Teacher in the Field" project. Our Teachers in the Field will get to participate in the **North American Monsoon Experiment (NAME)**, travel to Arizona and Mexico, and teach her/his classes via near real-time Web broadcasts. NOAA's Marine and Aviation Operations Office and NOAA's Office of Global Programs have successfully supported 10 Teachers at Sea and Teachers in the Field. The NOAA Teacher in the Field program is part of NOAA's Teacher at Sea program (see references below).

The Proposed Date:

A two to three week period during July 1, 2004 – August 15, 2004

The Location:

Tucson, Arizona (Forecast Operations Center)
Mazatlan, Mexico (Aircraft Operations Center)
Gulf of California (Ship Operations)

The Science:

The North American Monsoon Experiment (NAME) is an internationally coordinated research program aimed at determining the sources and limits of predictability of summertime precipitation over North America. It focuses on observing and understanding the key components of the North American monsoon system and their variability within the context of the evolving land surface-atmosphere-ocean annual cycle. NAME seeks improved understanding of the key physical processes that must be parameterized for improved simulations and predictions with climate models.

The primary objectives the field experiment in the Summer of 2004 are to (1) resolve the wind, temperature, and moisture fields at sufficient spatial and temporal resolutions to define the mean structure of the troposphere and its variability on monthly to weekly to diurnal (daily) time scales around the Gulf of California, across the Sierra Madre mountain range in northwestern Mexico, and into the desert Southwest of the US and (2) describe and understand the convective organization, dynamics, microphysics and life cycle of precipitation systems in the core region of the monsoon. NOAA has joined with NASA and the National Science Foundation in the US and several institutions in Mexico, including the Mexican Weather Service, universities and research centers to establish an improved network of radars, rain gauges, surface meteorological stations, balloon sounding sites, ships and aircraft throughout the regional domain of the experiment.

The ultimate goal of this effort is to better document, understand, model, and predict the variability of convection and precipitation during July-August over northwestern Mexico and its linkages to precipitation in the southwestern U.S.

Further details about the research:

North American Monsoon Experiment Main Web Site

The site is well populated with data sets, analyses and forecast products, as well as an extensive series of science planning documents and presentation materials.

<http://www.joss.ucar.edu/name/>

NAME Tier 1 Instrument Map

http://www.joss.ucar.edu/name/science_planning/name_instr.jpeg

NOAA Teacher at Sea Program

Applications are available on this web page

<http://www.tas.noaa.gov>

Office of Global Programs Sponsored Teachers at Sea

To learn more about sponsored Teachers at Sea, please visit <http://www.ogp.noaa.gov/tas>

Requirements/Qualifications:

- K-16 teacher currently employed by a school, college, or university (sabbaticals welcome)
- Fluent in Spanish
- Valid passport
- Computer savvy (familiar with using a digital camera, e-mail, and MS Word a plus)
- Comfortable with international travel (experienced traveler preferred)
- No problems flying for long flights in an airplane or spending time on a ship
- Unique ability to communicate complicated scientific information to students, with a preferred special interest in climate or ocean science
- Principal/School district/supervisor/ head of department **MUST** be extremely supportive of your participating in the project
- Comfortable in front of a camera (feel free to send demo video; videos will not be returned)

Costs:

All the necessary travel costs are covered by the sponsorship. In addition, a modest stipend will be paid. The NAME "Teachers in the Field" may travel to Washington, DC for an orientation and to at least one of the U.S research institutions that are involved in the experiment. While on the ship, the teacher will be expected to write daily logs, take (and transmit) digital pictures, interview scientists, host Web broadcasts, and prepare lesson plans involving the science of NAME. At the conclusion of this project, the teacher may be expected to attend a Congressional reception, hosted by her/his Representative and/or Senator(s).

If you are interested in this project, please start by visiting the NOAA Teacher at Sea Web site (<http://www.tas.noaa.gov>) and fill out the application and medical form. It is very important to note on your application that you are interested in being the **NAME Teacher in the Field (Summer 2004)**.

Note: The application is primarily geared toward our Teacher at Sea Program. If you are interested in the NAME project, you must note it on your application.

Once you complete and mail your application, **ALSO** send a copy of your resume to jennifer.hammond@noaa.gov. **All applications/resumes are due by February 20, 2004.**